In Reply : Early Moderate Hyperoxemia does not Predict Outcome After Aneurysmal Subarachnoid Hemorrhage

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To the Editor:

We thank Drs Shen and Du for their valuable comments[1] about our article "Early Moderate Hyperoxemia Does Not Predict Outcome After Aneurysmal Subarachnoid Hemorrhage."[2]

Targeting hyperoxemia in a neurocritical care setting is common practice, but the safety of hyperoxemia has been questioned. In previous studies the definition, the cutoff value, and time of assessment of hyperoxemia vary by study. Bellomo et al[3] have shown that the worst PaO2 is more representative of mean PaO2 than the first PaO2. Hyperoxia in the early phase of critical illness may be associated with worse outcome.[4] However, in most studies hyperoxia exposure is based on a single value of PaO2. We wanted to study the mean exposure to oxygen and we chose TWA-O2 as an indicator for that. It has been previously shown that there is a significant correlation between TWA-O2 and nPaO2[5] and similar findings were discovered in our study as presented in Figure. Drs Shen and Du[1] suggest a new index, the PaO2-load, to describe the exposure to hyperoxia. We consider this idea as truly interesting. We encourage Drs Shen and Du to investigate the usefulness of the PaO2-load.

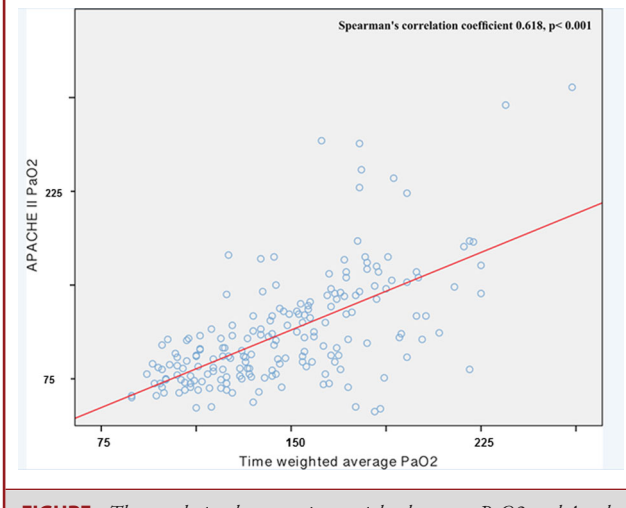

FIGURE. *The correlation between time-weighted average PaO2 and Apache II[6] PaO2; PaO2: partial pressure of oxygen.*

Disclosure

The authors have no personal, financial, or institutional interest in any of the drugs, materials, or devices described in this article.

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